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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,936	04/24/2002	Yasushi Watanabe	02500.000010	8758

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EXAMINER

GORMAN, DARREN W

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 02/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/019,936

Applicant(s)

WATANABE ET AL.

Examiner

Darren W Gorman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Drawings*

2. The drawings are objected to because Figure 18 has two misspellings. The words "compariosn" and "wothout" should be changed to "comparison" and "without" respectively.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

3. The disclosure is objected to because of the following informalities:  
  
On page 3, line 28, "ibration" should be replaced by "vibration".  
  
On page 28, line 15, "33e1" should be changed to "33e2".  
  
On pages 33-35, reference character "28" is used to define the "valve seat", "valve plug"; and "rotary roller" interchangeably.  
  
On page 56, line 23, "is" should be changed to "are".  
  
On page 56, line 26, "is" should be changed to "are".  
  
On page 67, line 5, "predetermine" should be changed to "predetermined".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation "said" in "said material feed port". There is insufficient antecedent basis for this limitation in the claim.

Also, regarding claim 1, lines 6-8, it is unclear why the "cover being detachably and airtightly provided for said material feed port of said powdered material storage hopper" is recited in the claim as an important element of the quantitative spraying device, when the cover is clearly a part of the powdered material storage hopper.

For the purpose of this office action, the claims will be examined as best understood by the examiner.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al., USPN 5,996,902, in view of Metz, USPN 4,462,547.

9. Morimoto et al discloses a powdered material spraying device comprising, a powdered material storage hopper (2) for storing a powdered material (h) including a cover detachably and airtightly provided (no reference number) for a material feed port (no reference number) of the powdered material storage hopper, and a quantitative spraying device (no reference number) with a material feed valve (21) provided for a material discharge port (no reference number) of the powdered material storage hopper. Morimoto et al. discloses the quantitative spraying device comprising, a cylindrical body (no reference number) with openings at a top end (no reference number) and at a lower end (no reference number), the cylindrical body being airtightly connected at the top end with the material discharge port of the powdered material storage hopper, an elastic membrane (3) with a penetrating aperture (3a) provided so as to form a bottom (no reference number) of the cylindrical body at its lower opening end, and a dispersion chamber (6) connected under the lower opening end of the cylindrical body via the elastic membrane. Morimoto et al. discloses the dispersion chamber comprising, a pulsating vibration air supply port (outlet end of 10) for supplying a positive pulsating vibration air to the dispersion chamber, and a discharge port (inlet of 11) connected with a conduit (11) for pneumatically transporting the powdered material to a tableting machine by means of the positive pulsating vibration air, the powdered material being discharged into the dispersion chamber via the penetrating aperture when the elastic membrane is vibrated up and down by the positive pulsating vibration air supplied in the dispersion

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chamber from the pulsating vibration air supply port and being dispersed by the positive pulsating vibration air supplied in the dispersion chamber (see Figures 1-3 and 5-6).

However, Morimoto et al. does not disclose a bypass pipe connected between the cylindrical body and the dispersion chamber.

Metz discloses a material spraying device with a material hopper (13) with a material discharge valve means (37) selectively releasing material into a holding tank (30), then transferring the material to a pump (16) where the material is pressurized and transferred to a conduit (36) (see Figure 2). Metz discloses a bypass pipe (38) between conduit (36) and holding tank (30) which returns a portion of the material in conduit (36) should a preset pressure be exceeded (see Figure 2; and column 4, lines 19-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a bypass pipe, as taught by Metz, with the powdered material spraying device of Morimoto et al. in order to regulate the desired pressure between the cylindrical body and the dispersion chamber so that pressure in the dispersion chamber does not exceed an operable condition.

***Allowable Subject Matter***

10. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patents to Smith, Jr. et al., Hibner et al., Fehlhafer, and Morimoto et al. disclose various types of powdered lubricant spraying/dispensing machines.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W Gorman whose telephone number is 703-306-4205. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on 703-308-2087. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.

Darren W Gorman  
Examiner  
Art Unit 3752

DWG 1/29/03  
DWG  
January 29, 2003

  
MICHAEL MAR 1-29-03  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700